

**Amendments to the Claims:**

The following claims will replace all prior versions of the claims in the application:

**Claims:** /

1 Claim 1 (original): A pre-cast polyacrylamide slab gel for use in slab gel  
2 electrophoresis, said pre-cast gel comprising:  
3 a pair of chemically inert, transparent plates with inner surfaces coated with a  
4 nonionic amphiphilic polymer; and  
5 a polyacrylamide gel cast between said plates.

1 Claim 2 (original): A pre-cast polyacrylamide slab gel in accordance with claim 1 in  
2 which said nonionic amphiphilic polymer is polyvinyl alcohol.

A1 1 Claim 3 (original): A pre-cast polyacrylamide slab gel in accordance with claim 1 in  
2 which said nonionic amphiphilic polymer is polyethylene glycol.

1 Claim 4 (original): A pre-cast polyacrylamide slab gel in accordance with claim 1 in  
2 which said plates are glass.

1 Claim 5 (original): A pre-cast polyacrylamide slab gel in accordance with claim 1 in  
2 which said plates are plastic.

1 Claim 6 (original): A pre-cast polyacrylamide slab gel in accordance with claim 1 in  
2 which said plates are polystyrene-acrylonitrile blend.

1 Claim 7 (currently amended): A pre-cast polyacrylamide slab gel in accordance with  
2 claim 1 further comprising a coating of polyvinylidene chloride between each ~~said~~ plate and said  
3 coating of nonionic amphiphilic polymer.